

**PATENT** 

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re t	he Appli	cation of:	) Group Art Unit:
	VAN E	OOREN et al.	) Examiner:
Serial	No.: 10/6	66,433	) <u>INFORMATION DISCLOSURE</u> ) STATEMENT
Filed:	Septembe	er 18, 2003	<u> </u>
Atty. F	ile No.: 3	8944-13-CIP	Express Mail Label: EL975239173US
For: "A PROCESS AND APPARATUS FOR IMPROVING AND CONTROLLING THE VULCANI- ZATION OF NATURAL AND SYNTHETIC RUBBER COMPOUNDS"			) ) ) ) ) ) ) )
P.O. B	ox 1450	22313-1450	
Sir:			
	The ref	erences cited on attached Form PT	O-1449 are being called to the attention of the Examiner.
Copies	s of the ci	ted references:	
		Are enclosed herewith.	
	$\boxtimes$	Are not enclosed in accordance v	with the waiver dated July 11, 2003, whereby patent
applica	ations file	d after June 30, 2003 need not sub	omit copies of U.S. patents, U.S. patent application
publica	ations and	l international applications that ha	ve entered the national stage under 35 U.S.C. § 371 after
June 3	0, 2003.		
	$\boxtimes$	Are not enclosed, in accordance	with 37 C.F.R. 1.98(d), because the references were
submit	ted to the	U.S. Patent and Trademark Office	e in prior application Serial No. 10/267,197 filed October 8
2002,	which is r	elied upon for an earlier filing date	e under 35 U.S.C. § 120.
		To the best of applicants' belief,	the pertinence of the foreign-language references are
believe	ed to be si	ummarized in the attached English	abstracts and in the figures, although applicants do not
necess	arily vou	ch for the accuracy of the translation	on.
		Examiner's attention is drawn to	the following co-pending application, copies of which have
been o	r are bein	g submitted:	
		Serial No. 10/267,197 filed Octo	ber 8, 2002
		Serial No. 10/102,614 filed Marc	ch 19, 2002

Submission of the above information is not intended as an admission that any item is citable under the statutes or rules to support a rejection, that any item disclosed represents analogous art, or that those skilled in the art would refer to or recognize the pertinence of any reference without the benefit of hindsight, nor should an inference be drawn as to the pertinence of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

• It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

# **FEES**

×	37 CFR 1.97(b): No fee is believed due in connection with this submission, because the information disclosure sta	stement					
	submitted herewith is satisfies one of the following conditions ("X" indicates satisfaction):						
	Within three months of the filing date of a national application other than a continued prose	cution					
	application under 37 CFR 1.53(d), or						
	Within three months of the date of entry into the national stage of an						
	international application as set forth in 37 CFR 1.491 or						
	Before the mailing date of a first Office Action on the merits, or						
	Before the mailing of a first Office action after the filing of a Request for						
	Continued Examination (RCE) under 37 CFR 1.114.						
	Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fe	ee to					
	Deposit Account 19-1970.						
	37 CFR 1.97(c): The information disclosure statement transmitted herewith is being filed after all the above condi-	tions (37					
	CFR 1.97(b)), but before the mailing date of one of the following conditions:						
	(1) a final action under 37 C.F.R. 1.113 or						
	(2) a notice of allowance under 37 C.F.R. 1.311, or						
	(3) an action that otherwise closes prosecution in the application.						
	This Information Disclosure Statement is accompanied by:						
	A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is						
	deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.						
	OR						
	A check in the amount of \$180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an						
	information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account	No. 19-					
	1970.						
	37 CFR 1.97(d): This Information Disclosure Statement is being submitted after the period specified in 37 CFR 1.	97(c).					
	This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1	.97(e)					
	AND						
	Applicants hereby requests consideration of the reference(s) disclosed herein. Enclosed is the fee	in the					
	amount of \$180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Depos	it .					
	Account No. 19-1970. Please credit any overpayment or charge any underpayment to Deposit Account No. 19-19	970.					
	Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification						

# Certification (37 C.F.R. 1.97(e)) (Applicable only if checked) The undersigned certifies that: Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(1). OR No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(2).

Respectfully submitted,

SHERIDAN RØSS Æ

Rv

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Date: 1000.



# U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO. 3944-13-CIP SERIAL NO. 10/666,433

APPLICANT

VAN DOREN et al.

FILING DATE September 18, 2003 **GROUP ART** 

# **U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
	1	6,472,885	10/29/2002	Green et al.	324	638	
	2	10/102,614		Magill			3/19/2002
	3	6,043,308	3/28/2000	Tanahashi et al.	524	495	
	4	5,996,006	11/30/1999	Speicher	709	218	
	5	5,961,913	10/5/1999	Haase	264	326	
	6	5,898,309	4/27/199	Becker et al.	324	689	
	7	5,874,832	2/23/1999	Gabelich	324	688	
	8	5,872,447	2/16/1999	Hager, III	324	71.1	
	9	5,569,591	10/29/1996	Kell et al.	435	29	
	10	5,528,155	6/18/1996	King et al.	324	713	
	11	5,521,515	5/28/1996	Campbell	324	674	
	12	5,486,319	1/23/1996	Stone et al.	264	406	
	13	5,459,406	10/17/1995	Louge	324	688	
	14	5,317,252	5/31/1994	Kranbuehl	324	71.7	
	15	5,283,731	2/1/1994	Lalonde et al.	364	401	
···	16	5,223,796	6/29/1993	Waldman et al.	324	687	
	17	5,219,498	6/15/1993	Keller et al.	264	40.2	
	18	5,208,544	5/4/1993	McBrearty et al.	324	687	
	19	5,032,525	7/16/1991	Lee et al.	436	55	
	20	5,008,307	4/16/1991	Inomata	523	220	***
	21	4,881,025	11/4/189	Gregory	324	61 R	
	22	4,868,769	9/19/1989	Persson	364	550	
	23	4,777,431	10/11/1988	Day et al.	324	61 P	
	24	4,773,021	9/20/1988	Harris et al.	364	476	
	25	4,723,908	2/9/1988	Kranbuehl	432	37	

**EXAMINER** 

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	26	4,676,101	6/30/1987	Baughman	73	304 C	
	27	4,551,807	Nov. 5, 1985	Hsich et al.	364	473	
	28	4,551,103	11/5/1985	Vitale	434	225	
	29	4,515,545	5/7/1985	Hinrichs et al.	425	143	
	30	4,510,436	4/9/1985	Raymond	324	61 P	
	31	4,510,103	4/9/1985	Yamaguchi et al.	264	40.2	
	32	4,496,697	1/29/1985	Zsolnay et al.	526	60	
	33	4,448,943	5/15/1984	Golba et al.	526	59	
	34	4,433,286	2/21/1984	Capots et al.	324	61 R	
	35	4,423,371	12/27/1983	Senturia et al.	324	61 R	
	36	4,399,100	8/16/1983	Zsolnay et al.	422	62	
	37	4,381,250	4/26/1983	Rittenhouse	252	182.1	
	38	4,373,092	2/8/1983	Zsolnay	528	481	
	39	4,344,142	8/10/1982	Diehr, II et al.	364	473	
	40	4,338,163	7/6/1982	Rittenhouse	204	2.1	
	41	4,331,516	5/25/1982	Meighan	204	2.1	
	42	3,879,644	4/22/1975	Malthy	317	246	
	43	3,781,672	12/25/1973	Malthy et al.	324	61 R	
	44	3,778,705	12/11/1973	Maithy	324	61 R	
	45	3,753,092	8/14/1973	Ludlow et al.	324	61 R	
	46	3,746,975	7/17/1973	Malthy	324	65 R	

# FOREIGN PATENT DOCUMENTS

						SUB	TRANSLATION	
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	CLASS	YES	NO	
	47	EP 1 050 888 A1	Nov. 3, 2000	Europe	H01B	1/20		
	48	EP 0 743 153 A1	Nov. 20, 1996	Europe	B29C	35/02		

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49	EP 0 540 103 B1	Feb. 7, 1996	Europe	C08K	5/3415	
50	WO 99/13346	Mar. 18, 1999	PCT	G01R	27/04	
				,		

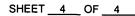
# OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

51	"Automatic, Computer Controlled, Processing of Advanced Composites"; Defense Small Business Innovation Research (SBIR) Program; April 7, 1988; 25 pgs.
52	Baumgartner et al.; "Computer Assisted Dielectric Cure Monitoring in Material Quality and Cure Process Control"; SAMPE Journal; July/August 1983; pgs. 6-16
53	Buczek; "Considerations in the Dielectric Analysis of Composites"; 40 <sup>th</sup> International SAMPE Symposium; May 8-11, 1995; pgs. 696-710
54	Buczek; "Self-Directed Process Control System for Epoxy Matrix Composites"; 40th International SAMPE Symposium; May 8-11, 1995; 8 pgs.
55	"Critical Point Control/Statistical Quality Control Software Module"; Micromet Instruments; 1993; 2 pgs.
56	Desanges; "Changes in the Electrical Properties of Natural Rubber/Carbon Black Compounds During Vulcaniation"; Revue Generale du Caoutchouc; December 1957; <b>34</b> (12); pgs. 631-649
57	"Dielectric Cure Testing on Polyester Bulk Molding Compound"; Holometrix Micromet; 2001; 3 pgs.; http://www.holometrix.com/holometrix/m_materialtest.asp
58	"Dielectric Sensors"; NETZSCH; February 21, 2002; pgs.
59	"Eumetric System III Microdielectrometer"; Holometrix Micromet; 2001; 5 pgs.
 60	"ICAM-1000 - In-mold Monitoring For SPC, SQC, and CPC (Critical Point Control) of Thermoset Molding Operations"; <i>Micromet Instruments</i> , <i>Inc.</i> ; at least as early as March 1990; 4 pgs.
61	"ICAM-1000 Industrial Cure Analysis & Monitoring System"; Micromet Instruments, Inc.; August 1, 1991; 1 pg.
 62	"ICAM-2000 Multi-Channel Cure Analyzer"; Micromet Instruments; 1993; 2 pgs.
63	Johnson et al.; "Production Implementation of Fully Automated, Closed Loop cure Control for Advanced Composite Strucutres"; 34th International SAMPE Symposium; May 8-11, 1989; pgs. 373-384
64	Keller et al.; "Computer Controlled Processing of Composites Utilizing Dielectric Signature Curves"; SAMPE Journal; September/October 1992; <b>28</b> (5); pgs. 25-33
65	Keller et al.; "Real Time, In-Situ Dielectric Monitoring of Advanced Composites Curing Processes"; <i>Programmed Composites, Inc.</i> ; August 1, 1987; 63 pgs.
66	Khastgir; "A Comparative Study of Step Curing and Continuous Curing Methods"; Rubber World; January 1994; pgs. 28-31
67	"Lockheed Signature Process Control for Composites Proposal"; Ketema Programmed Composites, Inc.; July 1, 1993; pgs. 1-12
68	"MDE Series 10 Cure Monitor"; Holometrix Micromet; at least as early as March 15, 2000; 2 pgs.

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**GROUP ART** 

	69	"Mono-Probe"; TYT-NAM-MON; October 27, 2000; 1 pg.
	70	"Northrop Aircraft Division RTM System Proposal"; Ketema Programmed Composites, Inc.; April 1, 1993; 13 pgs.
	71	"Notification of Transmittal of the International Search Report or the Declaration" from the Patent Cooperation Treaty in International Patent Application No. PCT/US02/32480 filed October 9, 2002.
	72	O'Conor et al.; "Update to the June 1990 Confidential Descriptive Memorandum"; <i>Micromet Instrument, Inc.</i> ; December 1, 1990; 17 pgs.
,	73	Persson; "A Novel Method of Measuring Cure - Dielectric Vulcametry"; Plastics and Rubber Processing and Applications; 1987; 7(2); pgs. 111-125
	74	"Product Selection Grid"; Holometrix Micromet; 2001; 1 pg.; http://www.holometrix.com/holometrix/m_prgrid.asp
	75	Rajeshwar; "AC Impedance Spectroscopy of Carbon Black-Rubber Composites"; Department of Chemistry and Biochemistry at The University of Texas as Arlington; September 21-24, 1999; 13 pgs.
	76	SmartTrac Advertisement, <i>Automotive News</i> ; May 21, 2001, 1 pg.
	77	"SmartTrac"; Innovative Aftermarket Systems, Inc.; 2001; 2 pgs. http://www.ias-inc.net/pages/products/smart.html
	78	"Textron Aerostructures Autoclave Process Control Proposal"; Ketema Programmed Composites, Inc.; February 12, 1993; 16 pgs.
	79	"The Eumetric System III Microdielectrometer"; Micromet Instruments, Inc.; September 1991; 4 pgs.
	80	"Thermokinetics"; NETZSCH; ; November 8, 2001; 2 pgs.
	81	"Tool Mount Sensors"; NETZSCH; February 21, 2002; 2 pgs.
	82	"Vulcanization of Natural Rubber"; NETZSCH; November 8, 2001; 2 pgs.
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